

Date: Wed, 5 May 93 19:11:48 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #543
To: Info-Hams

Info-Hams Digest Wed, 5 May 93 Volume 93 : Issue 543

Today's Topics:

Amateur Radio Scanner/Radio construction
AM Modulation
Another AM Question
Cellular capable scanners...Buy'em While you can!
Florida Ham's Legal Battle Over Antenna
Help-broken LCD display-Knwd701
Kenwood 732/742 Remote question
Need for foul language?
no-code defense
Raising our Profile
Ramsey Address
Satellite info wanted
Two-Line Orbital Element Set: Space Shuttle

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 6 May 1993 01:18:28 GMT
From: news.cerf.net!iat.holonet.net!kellys@network.UCSD.EDU
Subject: Amateur Radio Scanner/Radio construction
To: info-hams@ucsd.edu

I need to do a project based on electromagnetic radion for my physics class,
and, since I'm a HAM, I figured I'd make a HAM scanner. Does anyone know
of any sources that describe how to build a HAM scanner, or for that
matter, any type of radio or such?

--

Kelly Schwarzhoff

kellys@holonet.net

Date: 5 May 93 19:31:33 GMT

From: ogicse!emory!gatech!asuvax!chnews!joshua!jbromley@network.UCSD.EDU

Subject: AM Modulation

To: info-hams@ucsd.edu

In article <jchappel.9.0@sander.lockheed.com>

jchappel@sander.lockheed.com (Joel Chappell) writes:

>I came into this thread late, but I think the original question was, " why is
>the final stage modulated and is there any...etc"... The one answer I did
>not see was an explanation of "high level" v.s. "low level" modulation.
>Plate modulation of the final stage has the advantage of hitting 4X p.e.p.
>over the plate input. In other words a pair of 6146's running 100W dc input
>carrier will hit 400W peak envelope power on modulation peaks when the plate
>voltage is rased 2X by the plate modulator. All other forms of grid and
>choke modulation (low level) *for the same carrier input to the same circuit
>topology* produce some lesser value of peak envelope power.

Hmmmm. First of all, as all the died-in-their-woollies AMer's will tell
you, $4 * \text{carrier_power} = \text{peak_power}$ is true for *all* DSB-plus-full-carrier
modulation. And that relates to output power, not input power. Remember
the cries of anguish heard across the land when the FCC made the maximum
power limit for amateurs 1500 watts *peak envelope power*. That means
a carrier power output of 375 watts.

Plate modulation has the advantage of high efficiency. Period.

Control-grid modulation, screen-grid modulation, suppressor-grid modulation
and cathode modulation are *all* high-level modulation methods when
applied to the final amplifier. As is plate-modulation when so applied.
The key consideration is that the modulated stage has no linearity
requirements imposed upon it.

Low-level modulation is applying the modulation process to an amplifying
stage before the final and then *linearly* amplifying the signal up to
the desired power level.

> Taylor and

>Doherty modulation (not the same circuit topology) are capable of producing
>higher values of p.e.p. during the positive half of the modulation cycle as
>well and would be considered high level modulation.

I'll believe Taylor (isn't that the screen-grid modulation scheme used by Continental Electronics). The Doherty was a pure linear amplifier optimized for AM. It was never modulated itself. And, yes, it was capable of positive modulation peaks in excess of 100%, but that would have been with an unsymmetrical (or distorted) waveform.

>-=Joel - KC1SG=-

What the fuck is a no-code tech like me supposed to know about this MF/HF AM shit anyway? ;-)

```
+-----+-----+
| Jim Bromley W5GYJ          | Celebrating 30 years as a No-Code Technician |
| Intel Corp. m/s CH3-91    | (Definitely not an Intel Opinion)           |
| 5000 W. Chandler Blvd.    |                                               |
| Chandler,AZ 85226         |                                               |
| tel: 602-554-5183        | Internet: jlbromley@sedona.intel.com        |
+-----+-----+
```

Date: Mon, 3 May 1993 16:51:11 GMT
From: usc!elroy.jpl.nasa.gov!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpfcso!
myers@network.UCSD.EDU
Subject: Another AM Question
To: info-hams@ucsd.edu

> > Wrong. The flying receiver would see sidebands at the frequency of its
> > revolution rate. (A VERY fast airplane!)
>
> Now, let's see if I have this right. You take an unmodulated carrier,
> propagate it with directionality, and then rotate the signal about an axis
> perpendicular to propagation axis. Next you board a speedy jet and
> follow the maxima of the beam looking for the signal and modulation
> components. Flying in this manner, do you see both the carrier and
> some sidebands, or at least "sidebands".

I am afraid that I must disagree with Alan here - IF the plane were capable of exactly tracking the antenna, it would see the unmodulated carrier, and hence no sidebands (imagine a universe containing only the rotating antenna and a plane circling at the same rate, such that it "tracks" the beam; how does this differ from the case where both are fixed?). (Actually, I think Alan misunderstood the argument; he seems to have envisioned an airplane flying around a fixed antenna.)

However, this does NOT mean that you are correct in your original assertion that a fixed-position receiver observing the output of the rotating antenna would not see sidebands, whether or not it is obvious to you where these

come from. It should be clear that such a receiver sees a signal which varies in amplitude (essentially an AM signal), and thus DOES see sidebands in the frequency-domain view of this signal. Where do these sidebands come from, if they're not present in the "original signal"? From the rotation of the antenna - this IS, from the fixed receiver's point of view, amplitude modulation of the carrier, with the modulating frequency being the rate of rotation of the antenna. There MUST therefore be sidebands at +/- that rate. Always keep in mind that the time domain and frequency domain are inseparable; if you see something in one, you can ALWAYS predict what you see in the other.

If you simply MUST have a physical explanation of the sidebands in the frequency domain, consider how the distance between the receiver antenna and the hypothetical "point of radiation" at the transmitter is changing as the transmit antenna rotates. Better yet, consider the "view" of a rotating dipole antenna as seen from the receive antenna location. A very sloppy description of what's going on, but I think you'll get the idea if you follow that path.

(Damn. And I *swore* I wasn't going to get into this any deeper.....)

Bob Myers	KC0EW	Hewlett-Packard Co.	Opinions expressed here are not
		Systems Technology Div.	those of my employer or any other
myers@fc.hp.com		Fort Collins, Colorado	sentient life-form on this planet.

Date: 6 May 93 00:54:54 GMT
From: news-mail-gateway@ucsd.edu
Subject: Cellular capable scanners...Buy'em While you can!
To: info-hams@ucsd.edu

As someone else has pointed out what about selling a non-scanning receiver -- just receives the WX frequencies, unless you open it up snip a wire and then it becomes a scanner, including the cellular bands?

Seems like this isn't covered (as the regulations don't apply to a non-scanning RX -- even if it is easily modified to become a scanner).

Does a repeater make a kerchunk when no-one is listening to it? :-)

Kevin Purcell N7WIM / G8UDP (pro-nocode/anti-asshole)
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

Date: 6 May 1993 01:29:07 GMT
From: jgervais@ucsd.edu
Subject: Florida Ham's Legal Battle Over Antenna
To: info-hams@ucsd.edu

A few months ago there was a ham in Florida who apparently was having serious legal troubles regarding (I believe) their antenna. Has anyone heard anything of his/her current plight?

As a "clandestine" condo ham (with dreams of owning a large hilltop) I'd be very disappointed if the laws of the land started turning against hams/antennas right at the moment when I'm getting close to owning that darn hill....

Not to mention my concern for a fellow ham too, of course. :-)

Joe Gervais jgervais@ucsd.edu
KD6PRD ==> 13 WPM or Bust!

"So... if she... weighs the same as a		Mystery Science Theatre 3000	
duck... she's made of wood."		"It's not just cool, it's the	
"And therefore?"		only thing on TV Saturday	
"...a witch!!!"		afternoons."	

Date: Wed, 5 May 1993 10:50:24 GMT
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!
newsserver.jvnc.net!louie!pecan.cns.udel.edu!penneys@network.UCSD.EDU
Subject: Help-broken LCD display-Knwd701
To: info-hams@ucsd.edu

By a freak accident, the LCD display in my Kenwood 701 mobile transceiver broke.

Any ideas, how to get a new one in? Tnx Bob WN3K

.
:wq

Date: Tue, 04 May 93 20:16:48 PST
From: pacbell.com!pacbell!sactoh0!beagle!chandler@network.UCSD.EDU
Subject: Kenwood 732/742 Remote question
To: info-hams@ucsd.edu

easu348@orion.oac.uci.edu (Andrew Schwartz Parker) writes:

> I have a couple questions about the ability to access the Kenwood 732 and

> the new 742 through an HT (Kenwood or otherwise).

>

I just got the manual addendum from Kenwood today. Maybe I can answer a few of these questions. I can only speak about the 942/742. I don't know about the 732.

> 1. Do these radios have the ability to be accessed by remote in the first place?

Yes.

>

> 2. Does one need a Kenwood HT to do this?

No. Any radio capable of DMTF tones will work.

>

> 3. Would this be done through DSQ paging codes?

Sort of. A DTMF code is programmed into the radio to access the remote command functions. That code must be sent to put the radio into command mode.

>

> 4. Assuming all this is possible, could you change frequencies plus use other radio functions, or just turn the power on and off?

Here is a list of available functions:

Call Channel On/Off

CTCSS On/Off/Select

Direct Frequency Entry in VFO Mode

Memory Mode On/Off/Select

TX Power H/M/L

Frequency Up/Down

VFO Mode

Cross Band Repeat On/Off

>

> The answers to these questions would sure help me out quite a bit. I would appreciate any responses. Thanks in advance!

> Andrew

> s

> ?

> --

> Andrew Parker | KD6TGM | easu348@orion.oac.uci.edu

As I don't yet have a 742 (supposed to be delivered Wednesday) I have not been able to experiment with it. Call Kenwood at 310-639-7140 and ask for the Manual Addendum for the 742 for Remote Control by DTMF tones. BTW, it is illegal according to Part 97 to transmit control tones on 2 meters. All controlling must be done on 220 or above.

Jim Chandler, N0VAH

jwc@sactoh0.sac.ca.us
sactoh0!beagle!chandler

Date: Wed, 5 May 1993 11:02:49 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!usc!sdd.hp.com!
apollo.hp.com!hpwin052!hpqmoea!dstock@network.UCSD.EDU
Subject: Need for foul language?
To: info-hams@ucsd.edu

I've had a few requests for details on that book by Bierce, so it's worth posting

THE DEVIL'S DICTIONARY by AMBROSE BIERCE

published by Dover publications inc.
 180 Varick street
 New York
 N.Y. 10014

Standard book number 486-20487-1
Library of congress cat card number 62-8606

Here's a few quotes to whet the appetite:

Ambition - The death of endeavour and the birth of disgust

Egoist - A person of low taste, more interested in himself than me

Pray - To ask that the laws of the universe be annulled in behalf
of a single petitioner confessedly unworthy.

and another Churchill/ lady Astor one:

Lady Astor: If you were my husband, I would poison your food.

Churchill : And if you were my wife, madam, I would eat it !

(from memory so not verbatim)

I'm looking forwards to seeing much more effectively wounding insults on the net

Glad to be able to help a bit

David GM4ZNX

Date: 5 May 93 07:57:19 GMT
From: morrow.stanford.edu!morrow.stanford.edu!not-for-mail@decwrl.dec.com
Subject: no-code defense
To: info-hams@ucsd.edu

I favor no-code. In fact there is no reason to require code for any license with privileges only above 30Mhz.

Steve Eastman, Systems Programmer (KD6TTP 147.510)
Research Libraries Group, Inc.\Stanford University
1200 Villa Street, Mountain View, CA USA 94041-1100
VOX: 415-691-2387, FAX: 415-964-0943
BR.SJE@RLG.BITNET or BR.SJE@RLG.Stanford.Edu

"9th Amendment

The enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people."

Date: 5 May 93 22:17:13 GMT
From: news-mail-gateway@ucsd.edu
Subject: Raising our Profile
To: info-hams@ucsd.edu

>I find that when I show people my 2m HT that they can't believe that it
>is a "Ham Radio" and that I can talk locally (and 'regionally') with it.
>Most people tend to associate Amateur Radio with the stereotype OM with
>an HF transceiver and desktop mic.

>

>Yes, I agree that we, as Amateur Radio operators need to get out the
>message that will eventually break the old stereotypes.

>Jim

>VE4JAF

one problem that i have seen all over the country is that, in general, any reference material you might come across about amateur radio is from the 1950s. (this also seems to be generally true for electronics overall). I have been dropping off old handbooks and other publications as i can afford it, but that runs the risk of a librarian doing a quick compare of subject

matter and having them incorrectly decide that they already have a book on the subject on the shelf and put the new, shiny, saleable book in the pile for the upcoming library book sale fund drive.

and don't forget about the public school libraries -- in many cases they are in worse shape. (it was interesting reading a 1947 book on electronics, but it's hardly representative of the last 20 years of developments....)

getting reasonably current information about amateur radio into the library systems of the US should be a goal. there should not be a library without a handbook under 10 years old. (not to keen about license manuals going in since they age and become unusable faster than a general reference work).

bill wb9ivr

Date: 6 May 93 01:08:02 GMT
From: news-mail-gateway@ucsd.edu
Subject: Ramsey Address
To: info-hams@ucsd.edu

>Does anyone know the current address of Ramsey Electronics?

Ramsey Electronics, Inc., 793 Canning Parkway, Victor, NY 14564
PH# (716) 924-4560, FAX# (716) 924-4555...Cecil...de KG7BK

Date: Wed, 5 May 1993 10:09:13 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!doc.ic.ac.uk!pipex!sunic!ericom!
etxtsg@network.UCSD.EDU
Subject: Satellite info wanted
To: info-hams@ucsd.edu

I have just gotten my licence. Since im limited to 2 meters and 70 cm i'd like to try to work some satellite QSO:s. But there is one problem. I can track the sattelites and i hear them when they pass over me, but i have not got any idea about which frequencies and which mode to use. All the information i can get my hand on says that its mode B, S, LS or JL or something more or less cryptic. My guess is that these modes describes both up frequencies , down frequencies and traffic mode (SSB,CW etc) but how do i interpret them?

And if someone has a description of the different sattelites (up down freq etc) it would be most helpful to get me started.

Thanks

--

Thomas Grennefors, SM4UUA ! What is the airspeed velocity of an unladen swallow?
Ericsson Telecom,Karlstad ! What do you mean, an African or a European swallow?
etxtsg@solsta.ericsson.se ! Well...I don't know...AAAAARRRRRRRRRRRRRRGGGGGHHHH!!!

Date: 5 May 93 22:04:00 GMT
From: iris.mbvlab.wpafb.af.mil!blackbird.afit.af.mil!tkelso@uunet.uu.net
Subject: Two-Line Orbital Element Set: Space Shuttle
To: info-hams@ucsd.edu

The most current orbital elements from the NORAD two-line element sets are carried on the Celestial BBS, (513) 427-0674, and are updated daily (when possible). Documentation and tracking software are also available on this system. As a service to the satellite user community, the most current elements for the current shuttle mission are provided below. The Celestial BBS may be accessed 24 hours/day at 300, 1200, 2400, 4800, or 9600 bps using 8 data bits, 1 stop bit, no parity.

Element sets (also updated daily), shuttle elements, and some documentation and software are also available via anonymous ftp from archive.afit.af.mil (129.92.1.66) in the directory pub/space.

STS 55
1 22640U 93 27 A 93125.24999999 .00041435 00000-0 11400-3 0 240
2 22640 28.4566 204.4193 0014724 329.9791 340.6464 15.92206044 1379

--

Dr TS Kelso
tkelso@afit.af.mil

Assistant Professor of Space Operations
Air Force Institute of Technology

Date: Wed, 5 May 1993 09:37:48 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!kd4nc!
ke4zv!gary@network.UCSD.EDU
To: info-hams@ucsd.edu

References <C6Fp4o.F2L@news.Hawaii.Edu>, <easu348.736406456@orion.oac.uci.edu>,
<930503.231753.903.rusnews.w165w@mooch.sbs.com>
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: no-code defense

In article <930503.231753.903.rusnews.w165w@mooch.sbs.com> system@mooch.sbs.com
(Christopher Ogren) writes:

>

>Unfortunely this survey would leave out many of the long time HF
>amateurs who do not have access to the internet. I would like to see a
>poll, pertaining to no-code approval, of amateurs who were licensed
>BEFORE the no-code's inception. You might be surprised that it is not a
>majority of those hams who favored the no-code license. Including the
>no-codes in such a poll would alter a representation desired of those
>who were hams before DAY 1 of that license class. The existing no-codes
>would largely support a license class which of which they belong. The
>ARRL is too afraid to ever conduct such a poll. Maybe GALLUP would
><grin>.

Well I've been licensed since 1963, Novice then General, that's before
the Incentive Licensing crap. Now I hold an Advanced. So I know code,
but I lobbied for, and continue to support, the no code license, as
did the QCWA, made up *solely* of people licensed before no code, TAPR,
AMSAT, and other progressive organizations. I believe it's been a huge
success and has breathed new life into a moribund service. "Incentive"
licensing nearly killed American amateur radio, and continues to this
day to impose a nonsensical requirement to demonstrate high speed Morse
manual skills in order to get access to additional *voice* frequencies
at HF. That didn't make any sense in 1968, and it still doesn't today.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 5 May 93 21:01:34 GMT

From: ogicse!das-news.harvard.edu!noc.near.net!howland.reston.ans.net!

usenet.ins.cwru.edu!magnus.acs.ohio-state.edu!rlong@network.UCSD.EDU

To: info-hams@ucsd.edu

References <1993May5.135506.23027@ryn.mro4.dec.com>,

<1993May5.170027.6385@VFL.Paramax.COM>, <C6KFwA.ELC@squam.banyan.com>c

Subject : Re: Call for opinions: 9913 vs. CQ-FLEXI

As an alternative to 9913 you might consider Aircom Plus. This
is a new product being imported to USA from Germany by SSB
Electronics.

Like 9913 the dielectric is partly air. But instead of the spiral separator used in 9913 it has five radial ribs extending from a thin tube around the center conductor to another outer tube. They call it a plastic expander. It has solid copper foil shield (appears to be heavier than 9913) and a braid. Solid inner conductor. They say you can bend the coax sharply without displacing the center conductor. The expander "provides a tight seal around the inner conductor, ensuring it is protected against moisture and corrosion".

A special N plug has been made for the cable. It has a 3 micron gold plated interior pin, nickel plated exterior, waterproof construction and operates to 10 GHz. I was told it is longer too which provides a better grip of the outer conductor.

Price is supposed to be around 80 cents but they really were just guessing until the first shipment arrives and they find out the shipping costs and duties.

Call Jerry K3MKZ
717-868-5643 (eve).

I have no ax to grind - just listened to the pitch at Dayton and brought home a sample.

Ron w8gus@amsat.org

Date: Wed, 5 May 93 08:04:27 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!doc.ic.ac.uk!uknet!uos-ee!
ee.surrey.ac.uk!M.Willis@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993May4.095247.4499@abo.fi>, <1993May4.134120.29246@EE.Surrey.Ac.UK>,
<lud7svINN1oe@news.bbn.com>)

Subject : Re: Zed in callsign:what is it, where come from?

In article <lud7svINN1oe@news.bbn.com>, levin@bbn.com (Joel B Levin) writes:

|> M.Willis@ee.surrey.ac.uk (Mike Willis) writes:

|>

|> |On a different point I notice that many products are now being sold in the UK
|> |with lables with incorrect spelling (for our language). Now USA imports I can

|> ^^^^^^

|> |understand, but when it is made in the UK! Even metre gets spelt wrongly!

|> . . . etc. etc.

|>

|> I was surprised to learn of a new spelling of "label" in that funky

|> British dialect!

|>
|> /J
|> =
|> Nets: levin@bbn.com | "There were sweetheart roses on Yancey Wilmerding's
|> POTS: (617)873-3463 | bureau that morning. Wide-eyed and distraught, she
|> KD10N | stood with all her faculties rooted to the floor."
|> | -- S. J. Perelman
Good. I hoped sumwon would notice!

Mike

Date: 4 May 93 21:41:10 GMT
From: elroy.jpl.nasa.gov!sdd.hp.com!news.cs.indiana.edu!bsu-cs!news.nd.edu!
hilbert!rnimtz@ames.arpa
To: info-hams@ucsd.edu

References <930502.151850.7V4.rusnews.w165w@garlic.sbs.com>,
<C6Fp4o.F2L@news.Hawaii.Edu>, <930503.162837.6v1.rusnews.w165w@garlic.sbs.com>
Subject : Re: no-code defense

In article <930503.162837.6v1.rusnews.w165w@garlic.sbs.com> system@garlic.sbs.com
(Anthony S. Pelliccio) writes:

>jherman@uhunix.uhcc.Hawaii.Edu (Jeff Herman) writes:

>

>> So, ladies and gentlemen, why don't we take an informal poll here on
>> the net: give your callsign and state whether you support the no-code
>> license or feel it was a bad idea. I'll start:

>>

>> I'm NH6IL and I'm against the no-code license.

>

> I'm KD1NR and I'm against the no-code license.

>

I'm N9??? (the license is in the mail) and for no-code.

End of Info-Hams Digest V93 #543
